

ABSTRACT

A metabolic controlled fermentation process has been developed for the production of carbamoyl tobramycin by the application of different *Streptomyces tenebrarius* strains in submerged cultures at a temperature within about 37-41°C on a medium containing assimilable carbon and nitrogen sources, mineral salts and controlling the assimilable carbon and nitrogen sources by feeding in an optimal range. As a result of this invention a high yield production of carbamoyl tobramycin with high purity could be achieved.